Dear Shareholders:

This proxy statement supplement is furnished to you in connection with the solicitation of proxies for use at the 2011 Annual General Meeting of Shareholders of LyondellBasell Industries N.V. to be held at the Company’s offices at Weena 737, 3013 AM, Rotterdam, The Netherlands, at 1:00 p.m., local time, on Thursday, May 5, 2011, for purposes set forth in the proxy statement mailed to you on or about March 25, 2011.

After mailing our proxy statement, it came to our attention that the proxy card included with the proxy statement inadvertently omitted the proposal to elect Mr. Robert G. Gwin as a Class II director. All of the proposals and the information relating to such proposals, including the election of Mr. Gwin, were correctly set forth in the proxy statement previously mailed to shareholders and filed with the Securities and Exchange Commission.

An amended proxy card that includes the proposal to elect Mr. Gwin is enclosed. Our receipt of your new proxy or voting instructions will revoke and supersede any proxy or voting instructions previously submitted by you. Properly executed proxies that do not contain voting instructions for any item will be voted in accordance with the recommendations of the Supervisory Board.

Your vote is important. We encourage you to review the proxy materials previously provided to you and hope you will vote as soon as possible. You may vote by proxy over the Internet or by telephone by using the instructions provided in the Notice of Internet Availability of Proxy Materials. If you received paper copies of the proxy materials by mail, you can vote by mail by following the instructions on the proxy card. Voting over the Internet, by telephone or by written proxy will ensure your representation regardless of whether you attend in person. Instructions regarding the three methods of voting are contained in Notice of Internet Availability or proxy card. If you are a shareholder of record as of April 7, 2011 and have already voted and do not submit new voting instructions, your previously submitted proxy or voting instructions will be voted at the Annual General Meeting with respect to all proposals but will not be counted in determining the outcome of the election of Mr. Gwin to the Supervisory Board.

This proxy statement supplement will be mailed to shareholders on or about April 18, 2011.

Sincerely,

Craig B. Glidden
Secretary
LYONDELLBASELL INDUSTRIES N.V.
WEENA 737, 3013 AM,
ROTTERDAM, THE NETHERLANDS

VOTE BY INTERNET - www.proxyvote.com
Use the Internet to transmit your voting instructions and for electronic delivery of
information up until 11:59 p.m. Eastern Time the day before the cut-off date or
meeting date. Have your proxy card in hand when you access the web site and
follow the instructions to obtain your records and to create an electronic voting
instruction form.

ELECTRONIC DELIVERY OF FUTURE PROXY MATERIALS
If you would like to reduce the costs incurred by our company in mailing proxy
materials, you can consent to receiving all future proxy statements, proxy cards
and annual reports electronically via e-mail or the Internet. To sign up for
electronic delivery, please follow the instructions above to vote using the Internet
and, when prompted, indicate that you agree to receive or access proxy materials
electronically in future years.

VOTE BY PHONE - 1-800-690-6903
Use any touch-tone telephone to transmit your voting instructions up until
11:59 p.m. Eastern Time the day before the cut-off date or meeting date.
Have your proxy card in hand when you call and then follow the instructions.
When voting by telephone for Proposal 1, an Abstain vote will be a vote For
Other Nominee.

VOTE BY MAIL
Mark, sign and date your proxy card and return it in the postage-paid envelope we
have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way,
Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

LYONDELLBASELL INDUSTRIES
The Supervisory Board of Directors recommends
you vote FOR each of the first named candidate:

1. Class I Directors Election of
   a. Jagjeet S. Bindra OR
   b. Jacques Aigrain

Reelection of
   c. Milton Carroll OR
   d. Rudy van der Meer

2. Class II Directors Election of
   a. Robin Buchanan OR
   b. Robert G. Gwin

3. Class III Directors Election of
   a. Jacques Aigrain OR
   b. Jagjeet S. Bindra

The Supervisory Board of Directors recommends you
vote FOR the following proposals:

For Against Abstain

4. ADOPTION OF ANNUAL ACCOUNTS FOR 2010

5. DISCHARGE FROM LIABILITY OF SOLE MEMBER OF
   THE MANAGEMENT BOARD

6. DISCHARGE FROM LIABILITY OF MEMBERS OF THE
   SUPERVISORY BOARD

7. APPOINTMENT OF PRICEWATERHOUSECOOPERS LLP
   AS OUR INDEPENDENT REGISTERED PUBLIC
   ACCOUNTING FIRM

8. APPROVAL OF COMPENSATION OF THE MEMBERS OF
   THE SUPERVISORY BOARD

9. AMENDMENT TO ARTICLES OF ASSOCIATION

10. APPROVAL OF PROPOSED DIVIDEND IN RESPECT OF THE
    2010 FISCAL YEAR

11. ADVISORY (NON-BINDING) VOTE APPROVING EXECUTIVE
    COMPENSATION

12. ADVISORY (NON-BINDING) VOTE ON FREQUENCY
    OF ADVISORY VOTE APPROVING EXECUTIVE
    COMPENSATION

13. Class II Directors Election of
    a. Robert G. Gwin OR
    b. Robin Buchanan

THE SUPERVISORY BOARD OF DIRECTORS RECOMMENDS
YOU VOTE FOR EACH OF THE FIRST NAMED CANDIDATE:

Signature (PLEASE SIGN WITHIN BOX) Date

Signature (Joint Owners) Date
M35625-Z55162-P12611

Annual General Meeting of Shareholders
LyondellBasell Industries N.V.
Thursday, May 5, 2011, 1:00 p.m., local time
Weena 737
3013 AM Rotterdam
The Netherlands

Important Notice Regarding Internet Availability of Proxy Materials for the Annual Meeting:

THIS PROXY IS SOLICITED ON BEHALF OF THE SUPERVISORY BOARD OF DIRECTORS
ANNUAL GENERAL MEETING OF SHAREHOLDERS
MAY 5, 2011

The undersigned hereby appoints James L. Gallogly, C. Kent Potter and Craig B. Glidden or any of them, as proxies, each with full power of substitution, and hereby authorizes them to represent and to vote all of the ordinary shares of LyondellBasell Industries N.V. that the shareholder(s) is/are entitled to vote at the Annual General Meeting of Shareholders to be held at 1:00 p.m., local time, on Thursday, May 5, 2011, at the Company’s offices at Weena 737, 3013 AM Rotterdam, The Netherlands, and any adjournment or postponement thereof, as indicated on the reverse side of this proxy card with respect to the proposals set forth in the proxy statement and in their discretion upon any matter that may properly come before the meeting or any adjournment of the meeting. This proxy is governed by Dutch law.

THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED AS DIRECTED BY THE SHAREHOLDER(S).
IF NO SUCH DIRECTIONS ARE MADE, THIS PROXY WILL BE VOTED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SUPERVISORY BOARD OF DIRECTORS.

IF YOU ARE NOT VOTING ON THE INTERNET OR BY TELEPHONE, PLEASE MARK, SIGN, DATE AND RETURN THIS PROXY CARD PROMPTLY USING THE ENCLOSED REPLY ENVELOPE.